

Bowditch (V. Y.)

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Compliments of the author.

COMPARATIVE RESULTS
IN
NINETY CASES OF PLEURISY,

WITH SPECIAL REFERENCE TO THE

DEVELOPMENT OF PHTHISIS PULMONALIS.

presented by the author.

BY
VINCENT Y. BOWDITCH, M.D.,
OF BOSTON.



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*COMPARATIVE RESULTS IN NINETY CASES OF
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ADDRESS OF THE PRESIDENT.

BY VINCENT Y. BOWDITCH, M.D.,
OF BOSTON.

GENTLEMEN OF THE CLIMATOLOGICAL ASSOCIATION: It becomes my pleasant duty to bid you this year a cordial welcome to Boston, and to congratulate you upon the success and growth of our Society up to the present day. Excellent work has already been accomplished during the comparatively short existence of the Association, entitling it to an honorable position among the various specialist societies and giving us at the same time the hope of even better results in the future.

There are those who at first believed that the name of the Association suggested a too narrow field for it to continue to justify the hopes of its founders, and it has been gratifying to notice not only the changes of opinion in this respect but the cordial interest now shown by former doubters. Surely when it is fully understood that the object of our Society is not only the study of Climatology but that of Hydrology and of Diseases of the Chest, there can be no doubt as to the largeness of our field for study. It remains for us to show that by organization we can add valuable work to this special field of inquiry and prove that the American Cli-

matological Association is not merely a name but a power in the community.

With these introductory remarks I feel that I cannot do better than to follow the admirable course pursued by those who have preceded me in office, and give you the results of some special work which has interested me for several months past. I have entitled my paper, "Comparative Results in Ninety Cases of Pleurisy, with Special Reference to the Development of Phthisis Pulmonalis."

Having watched for some time the various opinions and discussions upon the question of the tubercular nature of pleurisy and its subsequent development into phthisis, and being struck with the widely varying ideas upon the subject, it occurred to me to make an investigation as to the results of the cases of pleurisy occurring in my father's practice from 1849 to 1879.

While recognizing the impossibility in any such investigation of determining absolutely the tubercular or non-tubercular character of pleurisy, I believed that I might at least be able to draw some practical conclusions from the subsequent history of these cases which would assist us in giving advice to our patients, and, more especially, prevent us from unnecessarily alarming ourselves, our patients, and their friends: a tendency which, I think, needs to be constantly guarded against in our profession, in the practice of which we are continually subjected to the influence of extreme views founded upon theories unsubstantiated by facts.

It may be well here to mention some of the various opinions held by eminent men in different countries as to the nature of pleurisy.

The most extreme views are held by Landouzy, of the Paris Faculty of Medicine, who believes that nearly all cases of pleurisy are tubercular in character, and that the so-called simple pleurisy from "taking cold" is a very rare thing, but that the great majority are the expression of an incipient

pulmonary tuberculosis which may appear at any subsequent time, even after an interval of many years. In this opinion he is enthusiastically followed by his pupils, J. R. G. Joanne¹ and Alois Mayor,² who give his views in two theses upon this subject.

Germain Sée³ believes that three-fourths of all pleurisies are tubercular, and quotes Fiedler, who says that out of 112 pleurisies which were aspirated 21 recovered, 25 died of phthisis, and 66 recovered from the pleurisy, but were found to be victims of other tubercular diseases.

Strümpell⁴ speaks of the simple fibrinous or exudative pleurisy as a rare disease, and says that the larger proportion are tubercular, and claims that even if phthisis appears several years later it is probably the result of pleurisy, and that only in comparatively few do the symptoms of acute tuberculosis or chronic phthisis appear as an *immediate* result.

Among those who take more moderate views may be mentioned Chauvet⁵ and Rühle,⁷ who go only so far as to say that many cases of pleurisy are probably tubercular in character.

Demandre⁷ speaks of the deformity of the chest and development of bronchiectasis, and says that usually with pleurisy comes an interstitial pneumonia, but gives no statistics as to the frequency of subsequent phthisis.

¹ Joanne (J. R. G.): "Du pronostic éloigné de la pleurésie." Thèse. Paris, 1881, p. 61, No. 230.

² Mayor (Alois): "De l'avenir des pleurétiques." Thèse. Faculté de Méd. de Par., 1887, No. 181.

³ Sée (Germain): Boston Med. and Surg. Journal, March 11, 1886.

⁴ Strümpell: Text-book of Medicine (translation), p. 244.

⁵ Chauvet: "De la pleurésie précédant le début de la tuberculose pulmonaire." Lyon. méd., 1885. xlix. 111-114.

⁶ Rühle: Ziemssen's Handbook of Medicine (translation), vol. v. p. 500.

⁷ Demandre: "Des conséquences et définitives des épauchements pleurétiques sereux, etc. Rec. de mém. de méd. . . . mil, Paris, 1881, xxxvii. p. 537.

Gerhardt,¹ in 1879, speaks of pleurisy as often preceding phthisis, but also gives no statistics.

Niemeyer² classifies various forms of pleurisy, and is evidently far from the opinion advanced by Landouzy.

Anstie³ says: "It is now well established, not merely that pleurisy occurs in phthisis, but that pleurisy can set up true tuberculosis even in previously healthy persons."

Bartholow⁴ speaks of the importance of recognizing pleurisy as a frequent cause of phthisis from causing tubercular deposit.

Loomis,⁵ while recognizing the existence of tubercular pleurisy, is very far from believing that all cases are of tubercular nature, or that they will be followed by phthisis.

Sir Andrew Clark⁶ recognized the fact that phthisis is by no means an infrequent sequence of pleurisy, but evidently is far from believing in the tubercular origin of all cases, and in these views he is supported by C. Theodore Williams,⁷ who, in the second edition of his book on "Pulmonary Consumption," says on page 24: "Not uncommonly the friction sound of dry pleurisy in the supraclavicular region is the first sign of the presence of tubercle at the apex of the lung. . . . It is generally noted that the lungs are the first organs affected (in miliary tuberculosis), and it is extremely rare for tubercle to exist in any organ without also being present in the lung." On page 49 he says: "Chronic pleurisy, by crippling the movements of the lungs and thus promoting congestions and exudations, prevents the proper expansion of the alveoli,

¹ Gerhardt: Wiener med. Wochenschrift, No. 40, 1879.

² Niemeyer: Text-book of Practical Med., vol. i. p. 249.

³ Anstie: Pepper's System of Med., vol. iii, p. 513.

⁴ Bartholow: Pepper's System of Med., vol. iii. p. 513.

⁵ Loomis: Practical Medicine, 1884, p. 186.

⁶ Clark (Sir Andrew): Lancet, 1885.

⁷ Williams (C. Theodore): Pulmonary Consumption, 1887. P. Blakiston & Son, Philadelphia.

and thus affords a nidus for the bacillus;" and on page 271: "There are two principal modes of origin of fibrosis (that is, non-tubercular phthisis), firstly, *from attacks of pleurisy*, and pleuro-pneumonia, etc."

F. C. Shattuck,¹ in an article on pleurisy, for the *Reference Handbook of the Medical Sciences*, says: "Whatever views one may hold as to the frequency of primary effusion as an independent disease, it cannot be denied that recovery absolute and permanent is common enough;" and, further on, adds: "In view of the fact that tuberculosis does develop in cases of this class after an interval which may be long, we cannot regard them with quite the same equanimity as we are justified in preserving in cases where rational and physical signs alike disappear."

B. F. Westbrook² and Herman F. Vickery,³ in papers published within the last two years, give results of cases of pleurisy which have subsequently become phthisical, and lay stress upon the importance of watching carefully the convalescence of pleurisies in all cases.

Strongly opposed to the views of Landouzy may be mentioned Theodore Dumin,⁴ of Warsaw, who expresses the greatest astonishment at the former's conclusions, and claims that true tubercular pleurisy, where miliary tubercles begin on the pleura, is a rare disease. He believes, on the other hand, that most pleurisies are the result of pulmonary tubercle, which cannot be detected by physical signs, and that the prognosis of the latter form depends upon

¹ Shattuck (F. C.): *Reference Handbook of Medical Sciences*. "Pleurisy."

² Westbrook (B. F.): "Pleurisy as a Predisposing Cause of Phthisis Pulmonalis." *New York Med. Journ.*, 1888, xlvii. 617.

³ Vickery (H. F.): "Pulmonary Tuberculosis as a Sequel to Ordinary Pleurisy with Effusion." *Med. and Surg. Journ.*, 1887, cxvii. 521.

⁴ Dumin (Theodore): "Observations sur les rapports qui existent entre la pleurésie et la tuberculose." *Gaz. Heb. de Méd.*, Paris, 1887, 2 s. xxiv. 295.

the course of the primary disease in the lung, which can be healed; views which seem to me as theoretical and difficult of proof as those he criticises.

A strong practical refutation of Landouzy's views appears in a paper by Blachez,¹ a man evidently of large practical experience, who scouts the idea of the tubercular origin of all pleurisies, and cites a number of cases classed as simple pleurisy which have never in later years developed the least pulmonary trouble. He also makes special mention of an epidemic of "pleurésie à figure," which occurred in the army many years ago, the subjects of which he has kept under supervision since, not a single symptom of pulmonary trouble having appeared in any one of them.

E. Martel,² of Saint-Malo, comes to the same conclusion as Blachez, and regards as ridiculous the opinion that nearly every case of pleurisy is tuberculous.

Austin Flint,³ in an analysis of 47 cases, states that in 3 the subsequent development of phthisis was probable, although not demonstrated, and in one case only was the occurrence of this disease as a sequel certain.

Of 53 cases reported by Blakiston,⁴ not one became phthisical during several years after recovery from pleurisy.

Thus we have specimens of the widely varying opinions among different observers.

In obtaining my results I have addressed the following set of printed questions to the patients or their friends, answers having been frequently obtained from physicians, who have known the patients, or from town clerks:

1. Where have you been living since you consulted Dr. Bowditch?

¹ Blachez: "La nature de la pleurésie." *Gaz. Heb. de Méd.*, Paris, 1886, 2 s. xxiii. 662.

² Martel (E.): *Gaz. Heb. de Méd.*, 1886, 2 s. xxiii. p. 699.

³ Flint (Austin): *Pepper's Hand-book of Medicine*, p. 394.

⁴ Blakiston: *Ditto*.

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2. What has been your occupation?
3. Has your general health since then been good, bad, or indifferent?
4. Have you been subject to cough since?
5. Have you had any lung trouble since, and if so, how long after you last saw Dr. Bowditch did the cough begin?

Should the patient be no longer living, will the friends kindly answer the following questions?

1. How long after the patient saw Dr. Bowditch did he (or she) die?
2. What was the cause of death?
3. Did the patient recover entirely for any length of time after last consulting Dr. Bowditch?
4. Was he (or she) subject to cough?
5. If lung trouble caused the death, about how long after seeing Dr. Bowditch did the cough begin?

If any reputable physician saw the patient at any time, please give his name and address; and if the physician has removed or died, please state, if you can, what he thought the patient died of.

Although the number of cases in which I have been able to collect satisfactory data is small in comparison to the number addressed, yet considering the lapse of time and the frequent uncertainty of address, I am gratified at having received replies from so many.

In analyzing the cases I have attempted no distinct classification into so-called "dry pleurisies," pleurisies with serous effusion and empyemas, but have put them all together, my endeavor having been to cast out every case in which there was the least evidence, upon careful examination, of co-existing pulmonary disease (for we all know that pleurisy is a frequent accompaniment of phthisical trouble).

Let me say, also, that with our knowledge that tubercular disease can arise and be checked never to reappear, I should not be so foolishly illogical as to attempt to prove in any given case of pleurisy that because of the subsequent health of the patient it was, therefore, of non-tubercular character. It would, moreover, be a just criticism to speak of the possibility of preëxisting disease of the lung in some

of the cases mentioned, even when the most careful examination failed to reveal any such condition.

Any such possible error is only an example of the extreme difficulty of arriving at precise conclusions in such questions.

My aim, therefore, is simply to show, as far as possible, how many of the patients have regained and kept their health and how many have succumbed later to phthisis or other probably tubercular disease.

For the sake of convenience, I have divided the thirty years from 1849 to 1879 into decades.

During the first decade, from 1849 to 1859 inclusive, I have the records of 30 patients.

Of these, 11 are now (1889) living, and have all been well, except one who has been subject to cough since at times; 17 are dead. In 2 the condition to day is not known, although in one case phthisical symptoms developed fourteen years after the examination, and is classed accordingly; and the other, seven years after the first illness, showed "perfect percussion note and respiration everywhere."

Of the 17 who died, 12 died of phthisis; 5 died from other causes:

No. 1, of chronic rheumatism thirty-five years later, aged eighty-five.

No. 12, from suicide during melancholia twenty-five years later, aged thirty, in the interval having been in robust health.

No. 14, from angina pectoris five years later aged fifty-eight, having been well in the interval.

No. 16, from "acute gastritis" thirty-one years later, aged sixty-nine, no evidence of pulmonary trouble showing itself, although rather delicate.

No. 3, from "inflammation of the bowels" twenty-two years later, aged forty-one, no apparent pulmonary trouble having been present, although after great privations in army life a cough appeared for some time, and then disappeared entirely.

Adding to the number now living, 11, the 1 whose present condition is unknown, but who seven years after the first examination showed a perfectly

normal condition, we have 12 who recovered entirely, or 40 per cent.

Adding to those who died of phthisis, 12, the 1 who developed phthisis fourteen years after the first examination, we have 13, or $43\frac{1}{3}$ per cent.

Died from other causes, 5, or $16\frac{2}{3}$ per cent.

In the second decade, from 1860 to 1869 inclusive, I have records of 19 cases.

Of these, 7 are now living, 5 having been in robust health since, 2 somewhat delicate, but without apparent pulmonary trouble.

12 are dead: 9 have died of phthisis, or have developed symptoms since; 3 have died from other causes. One (No. 32) died from "intermittent fever and chronic diarrhoea contracted in the army" two years later, aged thirty (questionable tubercular trouble). No. 40 died of acute mania twenty-three years later, aged thirty, the intervening period having been one of robust health.

Living = 7, or 36 + per cent.

Dead from phthisis, or with phthisical symptoms now = 9, or 47 + per cent.

Dead from other causes = 3, or 16 + per cent

Of No. 32 it should in fairness be noticed that the question of tubercular trouble in the intestines is raised. If such was the case, the original pleurisy was very possibly tubercular, which would alter the percentage slightly.

In the third decade, from 1870 to 1879 inclusive, I have the records of 41 cases.

Of these, 25 are now living without pulmonary symptoms, of whom 23 have been in good health since; 2 are not robust.

15 are dead: 9 have died from phthisis, and 1 (No. 87) is now phthisical = 10 phthisical; 6 have died from other causes: 3 (Nos. 51, 53, and 61) from heart disease, all over fifty years of age, and from ten to fifteen years after examination; 1 (No. 67) from apoplexy following Bright's disease twelve years later, aged sixty-eight, with apparently perfect health in the interval; 1 (No. 72) from "intestinal

obstruction" eleven years later, aged fifty-one, perfectly well before; 1 (No. 76) from "paralysis" three years later, aged fifty-one.

Living without pulmonary symptoms, $25 = 61 +$ per cent.

Dead from phthisis, or now having symptoms of phthisis, $10 = 24 +$ per cent.

Dead from other causes, $6 = 14 +$ per cent.

In comparing the percentage of mortality from phthisis in the cases from 1870 to 1879 inclusive with that of the cases of the first decade, 1849 to 1859, we find the percentage 24 per cent. in the former as against $43\frac{1}{3}$ per cent. in the latter, and against $47 +$ per cent. in the second decade, from 1860 to 1869 inclusive.

In attempting to explain this difference in percentage we must not lose sight of the fact of the possibility of the development of phthisical symptoms later in those of the third decade who now seem perfectly well. In one case reported by Mayor phthisical symptoms did not appear until twenty-four years after the pleuritic attack which occurred during childhood, this being, so far as we know, the longest interval spoken of, the patient, a comparatively young woman, succumbing to pulmonary disease—whether a result, as Mayor would have us believe, of the previous pleurisy, or not, being to my mind most questionable.

The fact remains that long periods of perfect health do occur between the onset of the two diseases, and we must, therefore, take this into account in comparing the later with the earlier decades.

In looking carefully over the tabulations, I find, in the first decade, among the deaths from phthisis, the following points:

1 patient died eighteen years after the pleuritic attack.

3 patients died between ten and fifteen years after the pleuritic attack.

9 patients died in seven years or less after the pleuritic attack.

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In the second decade, 1860 to 1869 inclusive :

1 patient died in eighteen years after the pleuritic attack.

2 patients died between ten and fifteen years after the pleuritic attack.

6 patients died under five years after the pleuritic attack.

In the third decade, from 1870 to 1879 inclusive :

1 patient died eleven years after the pleuritic attack.

1 patient died ten years after the pleuritic attack.

7 patients died under seven years after the pleuritic attack.

1 patient, still alive, developed phthisical signs about ten years later than the pleuritic attack.

Thus we see that in the first two decades about two-thirds of those who died of phthisis succumbed in seven years, or less, while about one-third lived from ten to eighteen years after. If we adopt the same ratio for the third decade, we have already passed the period (ten years) during which two-thirds of those who developed phthisis succumbed, and even supposing the possibility of a later appearance of phthisis in the remaining one-third, it still leaves the percentage of mortality from pulmonary disease from ten to fifteen per cent. less than in the previous decades.

Should this result be found similar to others in the future, it would give us ground for believing that modern methods of treatment in these cases are productive of better results than in the past. While not attempting to prove this fact, of course, by such tabulations, and granting that it may be mere coincidence, it is at least worthy of remark, and certainly points favorably toward the greater attention paid in later years to the after-treatment of pleurisies, by proper expansion of the chest, outdoor exercise, good food, etc.

In connection with the preceding, and as opposed to the extreme views mentioned before, I wish before closing to lay special stress upon this point, viz.,

that I consider as most unwarrantable the assertion, that because phthisis develops in any subject who, several years before, has had pleurisy, the two diseases in every case are necessarily dependent upon each other, the intervening period having been one of robust health.

As an example, let me cite the following case :

A man, now thirty-eight years of age, eleven years ago developed a sudden acute pleurisy, with effusion on the right side, for which he was aspirated by my father, after which he recovered quickly, but three months later was attacked with similar symptoms on the left side, for which he entered the City Hospital, where the fluid gradually disappeared without aspiration. In a few months he entirely regained his health, and has been perfectly well ever since, pursuing his occupation as conductor on one of the railroads near Boston. I examined him this spring, and found him a man of robust health, of good color, the chest full and well formed, the percussion and auscultation on both sides absolutely perfect without a trace of his former pleuritic trouble.

Now even supposing the possibility of a subsequent development of phthisis in this man, should we be justified in saying that the double-sided pleurisy was the first sign of the pulmonary disease which appears in later years? Most assuredly not, it seems to me; on the other hand, why is it not perfectly possible in such cases that the subsequent pulmonary disease is an independent process arising in precisely the same way as in other cases in which no history of a former pleurisy can be obtained?

This and similar cases where there is a long period of perfect health, make me think that the advocates of the certain connection between the two diseases and of the tubercular nature of all pleurisies are drawing conclusions too hastily.

The results of this investigation show us at least :

First. That whether we can prove absolutely, by such statistics, that all pleurisies are tubercular or not, yet a large percentage of these patients who

were afflicted with pleurisy, often in apparently chronic forms, recovered their health and have never had any recurrence of the original trouble nor development of subsequent pulmonary or otherwise tubercular trouble.

Second. That while undoubtedly there are many cases in which an attack of pleurisy is followed within a comparatively short space of time by pulmonary trouble; and, therefore, special care should be taken of the patient during convalescence from the former disease, yet we are not justified in giving such gloomy prognosis as we should be inclined by accepting the extreme views held by Landouzy and his followers.

To give hope and courage to patient and friends should be the first effort of every physician.

Let us be doubly on our guard then, while looking for the truth, in accepting conclusions founded upon insufficient evidence, lest we run the risk of hindering what we most desire, viz., the recovery of our patients.

TABLE OF NINETY CASES OF PLEURISY SHOWING THE ULTIMATE RESULTS.

FIRST DECADE, FROM 1849 TO 1859 INCLUSIVE.

No.	Sex.	Age.	Date.	Disease.	Result.	Cause of death.	No. of years between examination and death.	Age in 1889.	Age at time of death.	Remarks.
1	M.	42	1849	Acute pleurisy (left).	Dead.	Chronic rheumatism. Probably phthisis.	35	..	77	
2	M.	32	1849	Pleurisy (left).	Dead.	" Inflammation of bowels."	3	..	35	At one time cough, which disappeared again.
3	M.	19	1853	Pleurisy (right); tapped.	Dead.	Phthisis.	22	..	41	"Health good since."
4	M.	42	1853	Pleurisy (right); tapped.	Dead.	Phthisis.	11	..	53	"Health good since."
5	M.	24	1853	Empyema (right); tapped.	Living.	.....	.....	60	.....	"Well since."
6	F.	33	1854	Pleuritic effusion (right).	Living.	.....	.....	68	.....	"Health good since."
7	M.	20	1854	Pleurisy (left).	Living.	.....	.....	55	.....	"Well since."
8	F.	..	1854	Acute empyema (left); two weeks.	Dead.	Phthisis.	18	..	Well advanced.	Perfectly well up to two weeks before first visit.
9	M.	14	1855	Pleuritic effusion (right).	Dead.	Phthisis.	6	..	20	Perfectly well apparently up to a short time before death, then sudden decline.
10	M.	21	1856	Pleurisy (right), following fall.	Living.	.....	.....	54	.....	"Well since."
11	M.	52	1856	Pleuritic effusion (right), after swallowing melon seed.	Living.	.....	.....	85	.....	"Well since."
12	F.	5	1856	Empyema (left); permanent opening.	Dead.	Melancholia suicide?	30	..	35	Perfectly well as far as lungs were concerned.
13	M.	25	1856	Pleurisy; convalescent at home.	Living.	.....	.....	58	.....	"Well since."
14	M.	53	1856	Pleuritic effusion (right).	Dead.	Angina pectoris.	5	..	58	No return of trouble.
15	M.	Ad't	1856	Pleurisy (right).	Dead.	"Quick consumption."	2 mos.	..	Adult	
16	M.	38	1856	Chronic pleurisy (right).	Dead.	Acute gastritis.	31	..	69	"Not subject to cough, but had to be careful."
17	M.	38	1857	Pleurisy (left).	?	.....	.....	..	.....	In 1853 (7 years later) "auscultation and percussion perfect." Further history not known.
18	M.	..	1857	Pleuritic effusion (right).	Dead.	Phthisis.	7	..	Adult	"Failed from commencement."
19	M.	47	1857	Pleuritic effusion (right).	Dead.	Phthisis.	.....	..	48+	"Crackling in left apex a year later."
20	F.	32	1857	Pleurisy (right).	Dead.	Phthisis.	7	..	39	
21	M.	26	1857	Pleurisy (right).	Dead.	Phthisis.	2	..	28	Ill a few months before visit.
22	M.	28	1857	Pleurisy (right).	Living.	.....	.....	60	.....	"Fair health; subject to cough, which is better, but never cured."
23	F.	13	1857	Pleurisy (left).	Living.	.....	.....	45	.....	"Well since."
24	M.	Ab't 30	1857	Pleurisy with effusion (right).	Living.	.....	.....	About 62	.....	"Well since."
25	M.	12	1858	Pleurisy (left).	Living.	.....	.....	43	.....	"Well since."
26	M.	..	1858	Pleurisy (right).	Living.	.....	.....	..	.....	"Well since"
27	M.	30	1858	Pleurisy (right).	Dead.	Phthisis.	15	..	45	No evidence of pulmonary trouble until ten or twelve years later.
28	M.	24	1859	Pleurisy (left) of one year before.	Dead.	Phthisis.	2	..	26	
29	M.	25	1859	Pleuritic effusion (right).	Dead.	Phthisis.	7	..	32	Signs of phthisis began about 14 years after attack of pleurisy.
30	F.	47	1859	Pleurisy (right) sixteen years before.	?	Probably phthisis.	.....	..	47+	

SECOND DECADE, FROM 1860 TO 1869 INCLUSIVE.

31	M.	39	1860	Pleurisy (left).	Living.	.....	.....	68	.....	"Well since."
32	M.	28	1860	Pleurisy (right).	Dead.	Intermittent fever and chronic diarrhœa.	2	..	30	Contracted intermittent fever in army in 1861; had had pleuritic pains several months before examination.
33	F.	37	1860	Pleurisy with effusion (left).	Living.	.....	.....	66	.....	"No lung trouble since."
34	M.	25	1860	Pleurisy (right).	Dead.	Phthisis.	3¼	..	28½	Health never good after first attack.
35	M.	60	1860	Pleurisy with effusion (right).	Dead.	Chronic nephritis.	20	..	80	
36	M.	35	1861	Pleurisy (left).	Dead.	Phthisis.	18	..	53	"In 1876 evident tubercular disease of left apex."
37	M.	32	1866	Pleurisy with effusion (left); tapped.	Dead.	Phthisis.	2	..	34	"Well since."
38	M.	24	1866	Pleurisy (left).	Living.	.....	.....	42	.....	"Recovered entirely for 6 years."
39	M.	30	1861	Pleurisy (right).	Dead.	Phthisis.	12	..	42	Had melancholia, but otherwise had been picture of health;
40	F.	7	1861	Empyema (right); tapped.	Dead.	Acute mania.	32	..	30	lungs perfectly sound.
41	M.	54	1866	Pleurisy with effusion (left); tapped.	Dead.	Phthisis.	5	..	59	"Never fully recovered."
42	M.	18	1867	Pleurisy (right).	Living.	.....	.....	40	.....	"No lung trouble since."
43	F.	17	1867	Pleurisy (left).	Living.	.....	.....	39	.....	"Excellent health since."
44	M.	50	1867	Pleurisy (left).	Dead.	"Bronchial consumption, phthisis.	13	..	63	"Never entirely recovered; subject to cough."
45	M.	42	1867	Pleurisy (right).	Living.	.....	.....	64	.....	"Health good since; delicate."
46	M	28	1868	Pleurisy with effusion (left); tapped.	Dead.	Phthisis.	2	..	30	"Indifferent health; no cough since."
47	M	22	1868	Pleurisy (right).	Living.	.....	.....	43	.....
48	M.	24	1869	Pleurisy with effusion (right); tapped.	Dead.	Phthisis.	1	..	25	Two or three years later "moist râles in left back. Losing strength."
49	M.	43	1869	Pleurisy (left).	Dead.	Probably phthisis.	4?	..	47+	

THIRD DECADE, FROM 1870 TO 1879 INCLUSIVE.

50	M.	49	1870	Pleurisy (left).	Living.	.....	.....	68	.....	"Well."
51	M.	48	1870	Pleurisy (right).	Dead.	"Heart disease."	16	..	64	"Died suddenly after two days' illness. Not subject to cough."
52	M.	22	1870	Pleurisy (left).	Living.	.....	.....	41	.....	"No lung trouble." Living in Minneapolis.
53	M.	63	1870	Old pleurisy (right) ten years before.	Dead.	"Heart disease."	?	..	63+	Date of death not to be ascertained.
54	M.	4	1870	Empyema (right); tapped.	Living.	.....	.....	23	.....	Theological student. Well.
55	M.	34	1871	Old pleurisy (right) one year and a half before	Dead.	Phthisis.	2	..	36	Died, of "effects of pleurisy, in Colorado."
56	M.	36	1871	Chronic pleurisy (right)	Living.	.....	.....	54	.....	"Indifferent health. Subject to cough since."
57	M.	32	1871	Pleurisy (left).	Dead.	Phthisis.	3 mos.	..	32	
58	M.	37	1872	Pleurisy (left).	Living.	.....	.....	54	.....	"Well since."
59	M.	15	1872	Pleurisy (right) two years before.	Living.	.....	.....	32	.....	Well since.
60	M.	10	1870	Pleurisy (left).	Living.	.....	.....	29	.....	Well since.
61	M.	59	1872	Pleurisy (left).	Dead.	Heart disease.	13	..	72	"Never recovered from first attack."
62	M.	51	1872	Pleurisy (right).	Dead.	Phthisis.	11	..	62	"Health good since."
63	M.	12	1872	Pleurisy (right).	Living.	.....	.....	29	.....	Well since.
64	M.	39	1873	Pleurisy with effusion (right); tapped.	Living.	.....	.....	54	.....
65	F.	26	1873	Pleurisy with effusion (right); tapped.	Dead.	Acute congestion of lungs with phthisis.	10	..	36	"Good health up to within a year or two of death."
66	M.	46	1873	Pleurisy (right).	Living.	.....	.....	62	.....	Well.
67	M.	56	1873	Pleurisy (left).	Dead.	Apoplexy following Bright's disease.	12	..	68	Perfectly well as far as lungs were concerned.
68	F.	32	1873	Pleurisy (right).	Dead.	Phthisis.	7	..	.....	"Never well afterward."
69	M.	32	1873	Pleurisy with effusion (right); tapped.	Living.	.....	.....	48	.....	"Robust health since. One hemorrhage six years later."
70	M.	51	1873	Pleurisy with effusion (right).	Dead.	"Chronic pneumonia. Phthisis.	3	..	54	Went south, and died not known exactly when.
71	M.	22	1873	Pleurisy (right).	Dead.	Intestinal obstruction.	11	..	51	Recovered entirely from pleurisy, and was unusually well up to death.
72	F.	40	1873	Pleurisy (right).	Dead.	.....	.....	47	.....	"Well since, with exception of pneumonia in 1885."
73	M.	32	1874	Pleurisy (right).	Living.	.....	.....	49	.....	"Well since."
74	M.	34	1874	Pleurisy (right).	Living.	"Paralysis."	.....	49	.....
75	M.	34	1874	Pleurisy with effusion (right); tapped.	Living.	.....	.....	49	.....
76	M.	41	1874	Pleurisy with effusion (left); tapped.	Dead.	.....	3	..	51	After two years recovered completely, and is perfectly well.
77	M.	16	1874	Empyema (left); permanent opening.	Living.	.....	.....	31	.....	"Health good since. Practising law."
78	M.	29	1875	Old pleurisy (right); twice years previously	Living.	.....	.....	43	.....	"No lung trouble since. Well."
79	M.	10	1875	Pleurisy (left).	Living.	.....	.....	24	.....	"General health good. Thinks right lung has never regained former condition."
80	F.	52	1875	Pleurisy (right).	Living.	.....	.....	66	.....	"Improved, but had hemorrhage one year later."
81	M.	43	1875	Pleurisy with effusion (left).	Dead.	Phthisis.	3	..	46	"Good health. No lung trouble since."
82	M.	46	1875	Old pleurisy (left) six months previously.	Living.	.....	.....	60	.....	"Has felt perfectly well since."
83	M.	29	1876	Empyema (right); tapped several times.	Living.	.....	.....	42	.....	"Two years before he regained health, which has been good since. No cough."
84	M.	43	1876	Old pleurisy (left) three months previously.	Living.	.....	.....	56	.....	"Good health since."
85	F.	61	1877	Old pleurisy (right) twenty-five years before.	Living.	.....	.....	73	.....	"No lung trouble since. Well."
86	M.	20	1877	Empyema (right); tapped and permanent opening.	Living.	.....	.....	32	.....	"General health good. Thinks right lung has never regained former condition."
87	F.	18	1877	Pleurisy with effusion (right) nineteen months standing; later empyema; permanent opening.	Living.	.....	.....	30	.....	"Improved, but had hemorrhage one year later."
88	M.	52	1878	Pleurisy with effusion (left) two years before.	Dead.	Phthisis.	1	..	53	"Good health. No lung trouble since."
89	M.	27	1878	Pleurisy with effusion (right); tapped. Three months later pleurisy (left).	Living.	.....	.....	38	.....	"Has felt perfectly well since."
90	F.	23	1875	Acute circumscribed pleurisy.	Living.	.....	.....	37	.....	"Two years before he regained health, which has been good since. No cough."

